These Minutes are approved and final. Full Board review and decision took place at the February 25, 2014 Regular Meeting of the Board

MONTANA BOARD OF INVESTMENTS
DEPARTMENT OF COMMERCE
2401 Colonial Drive, 3rd Floor
Helena, Montana

MINUTES OF THE MEETING
November 19, 2013

BOARD MEMBERS PRESENT:
Mark Noennig, Chairman (via conference call)
Kathy Bessette
Gary Buchanan
Karl Englund
Quinton Nyman
Jack Prothero
Marilyn Ryan
Jon Satre
Sheena Wilson

LEGISLATIVE LIAISONS PRESENT:
Senator Dave Lewis
Representative Kelly McCarthy

STAFF PRESENT:
Polly Boutin, Accountant
Jason Brent, CFA,
Alternative Investments Analyst
Geri Burton, Deputy Director
Dana Chapman, Board Secretary
Richard Cooley, CFA, Portfolio Manager,
Fixed Income/STIP
Frank Cornwell, CPA,
Deputy Financial Manager
Roberta Diaz, Accountant
David Ewer, Executive Director
Tim House, Investment Operations Chief
Ethan Hurley, CAIA, Portfolio Manager,
Alternative Equities
Ed Kelly, Alternative Investments Analyst
Teri Kolnik, CFA, Alternative
Investments Analyst
Herb Kulow, MCMB,
Portfolio Manager, In-State Loan Program
Tammy Lindgren, Accountant
April Madden, Accountant
Gayle Moon, CPA, Financial Manager
Rande Muffick, CFA, Portfolio Manager,
Public Equities
Chris Phillips, CFA, Investment Staff
Jon Putnam, CFA, FRM, Fixed Income
Investment Analyst
John Romasko, CFA, CPA, Fixed Income
Investment Analyst
Nathan Sax, CFA, Portfolio Manager,
Fixed Income
Clifford A. Sheets, CFA,
Chief Investment Officer
Steve Strong, Equity Investment Analyst
Louise Welsh, Senior Bond Program Officer
Dan Zarling, CFA, Director of Research

GUESTS:
Becky Gratsinger, CFA, R.V. Kuhns & Associates
Jim Voytko, R.V. Kuhns & Associates
Roxanne Minnehan, Public Employees' Retirement System
John Harrington, Legislative Audit Division
Sam Schaefer, Legislative Audit Division
Kris Wilkinson, Legislative Audit Division
Sheri Scurr, Legislative Services Division
Mark Barry, Montana State Fund

CALL TO ORDER

Board Chairman Mark Noennig called the regular meeting of the Board of Investments (Board) to order at 10:45 AM. As noted above, a quorum of Board Members was present. Board Chairman Noennig attended via telephone conference call and designated Vice Chairman Karl Englund to conduct the meeting.

Vice Chairman Englund asked for public comment. There was no public comment.

Vice Chairman Englund called for any corrections or revisions to the Board minutes from the August 20, 2013 and October 9, 2013 meetings. Member Marilyn Ryan had two corrections for the August 20, 2013 minutes: page 1 under attendees, Mike Heale with CEM Benchmarking, Inc. needs to be added as a meeting attendee; and at the top of page 14 under interviewees for the TRS executive director position, two applicants were interviewed, not several.

> Board Member Jack Prothero made a Motion to approve the August 20, 2013, Board Meeting Minutes, as corrected. Member Jon Satre seconded the Motion. The Motion carried 9-0.
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> Board Member Jack Prothero made a Motion to approve the October 9, 2013, Special Board Meeting Minutes. Member Marilyn Ryan seconded the Motion. The Motion carried 9-0.

ADMINISTRATIVE BUSINESS

Audit Committee Report

Audit Committee Chair Jon Satre reported on items discussed at the Committee Meeting held prior to the regular Board Meeting. Executive Director Ewer will give the Board an update on Securities Litigation later in the agenda. The legislative fiscal analyst is working on the financial audit; the Board of Investments has submitted all required information and is awaiting final comments. The performance audit is in process and expected to go before the Legislative Audit Committee by early 2014. Responding to a question from Vice Chairman Englund, Executive Director Ewer advised the performance audit first goes before the Legislative Audit Committee, then after presentation to the Committee, it is given to MBOI for final review and preparation of an official response. Audit Committee Chairman Jon Satre may choose to call for the full Board to meet with staff via conference call to review staff recommendations prior to preparation and submission of the official response.

Human Resource Committee Report

Human Resource Committee Chairman Karl Englund reported on the Committee meeting held prior to the Board meeting. The Committee reviewed the annual performance evaluations of exempt staff and the Committee is pleased to report all evaluations were good. The Committee discussed the review of Executive Director Ewer and has an outline which will be finalized and written up for final approval by the Committee. At Member Gary Buchanan's request, the Committee discussed and considered moving the annual May salary reviews for exempt staff to later in the year; however, the Committee decided to keep the schedule as it currently is.

Loan Committee Report

The Loan Committee met prior to the Board meeting. Committee Chairman Jack Prothero reported the Committee reviewed four INTERCAP loans which are contained within the Board packet: Amsterdam Churchill County Sewer District for $2.2 million interim financing for a wastewater project; Montana Department of Transportation (MDT) for $3.7 million for purchase of motor pool vehicles; the City of Boulder for $3.55 million interim financing for a wastewater project; and Craig County Water and Sewer District for $1.3 million interim financing for a wastewater project. All four loans were approved by the Loan Committee.

Mr. Herb Kulow presented two loan requests. The first loan is an infrastructure loan to the City of Great Falls for $4,999,800 for land and buildings to house ADF Group USA, Inc. and ADF International, Inc. The second loan is a participation loan for $2.7 million to ADF International, Inc. The loan dollar amount requires full Board approval, so consideration will be deferred until later in the agenda after Mr. Kulow has presented the loans to the full Board. The Committee is recommending approval of the two loans.

Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS) Updates
Member Marilyn Ryan reported TRS is a party in the retirees' lawsuit challenging the changes made by the 2013 legislature to the Guaranteed Annual Benefit Adjustment (GABA) cost of living. The Attorney General is managing case; TRS is on sidelines at this point. The new TRS Executive Director Shawn Graham has been hired.

Member Sheena Wilson reported PERS is also awaiting action on the GABA lawsuit and staff is preparing to act for either outcome on January 1, 2014, depending on whether or not the injunction on the GABA legislation is granted. Looking ahead to the 2015 legislative session, two pension systems will require additional attention: Game Wardens' Retirement and Sheriffs' Retirement. PERS Executive Director Roxanne Minnehan is back on the job and a process is in place to address any lingering issues regarding her brief removal by the PERS Board Chairman.

Member Wilson added if the GABA remains at 3%, the impact will be substantial when figuring the funded status of PERS. Member Ryan noted for TRS the GABA varies from PERS in that it is set at 1.5%.

Legislative Liaisons Comments
None

EXECUTIVE DIRECTOR'S REPORT

Overall Comments
Executive Director David Ewer presented his executive director's memo. Per member requests from the last meeting, the quarterly cost report reflects the quarterly changes over the same quarter for the previous fiscal year. Responding to a question from Member Jon Satre, Mr. Ewer noted the additional amount of $477,762 over the same quarter last year is due in part to Board fees not charged to the investment pools for July 2012 in order to maintain working capital levels within set limits. This resulted in lower fees for the first quarter of fiscal year 2013.

Member Gary Buchanan asked if the fee statement reflects savings expected by the transition in May 2012 to more passive investments of public equity holdings. Mr. Cliff Sheets responded, yes, savings are reflected; however, due to the substantial increase in market values, much of the savings were offset, as fees are based on market values.

Executive Director Ewer reported the performance audit is proceeding as expected.

Executive Director Ewer reviewed securities litigation and referenced the sample page reflecting some of the suits MBOI is involved in. State Street Bank, as custodial bank, manages the hundreds of securities litigation cases which require MBOI's involvement. Mr. Ewer added a statement of recovery from ongoing or resolved suits is presented annually to the Board. Any unusual circumstances or issues requiring action are brought before the Board.

Executive Director Ewer reviewed Resolution 218 which designates the Deputy Director as authorized to act on behalf of the Executive Director in case of incapacitation and is reviewed annually. He also presented the Resolution 217 memo which is provided annually to the Board and

details any changes or revisions made over the preceding year to authorized investment managers and broker accounts.

Mr. Cliff Sheets added an additional note regarding manager fees. The four small and midcap managers hired for the domestic equity pool will result in higher management fees.

Mr. Ewer reported the annual report is under way and will be completed by the December 31st deadline. He also stated the importance of participation by the public in governmental public meetings and noted each Board meeting agenda provides opportunities for public access by regular stated calls for comment during Board meetings.

Executive Director Ewer provided an update on the upcoming Request for Proposal (RFP) for hiring of the custodial bank. The RFP discussion is on the agenda for the April 2014 Board meeting. The process will differ from the recent RFP process for a consultant and will not require an ad hoc committee be set up. Staff will work with the appropriate staff at the Department of Administration.

Mr. Ewer presented the draft 2014 Board meeting schedule. Dates are on the same timeline as the 2013 calendar, consisting of quarterly meetings scheduled for two days, with two interim one day meetings scheduled in April and October. Mr. Ewer also reviewed the draft 2014 Work Plan.

Responding to a question from Member Buchanan asking about scheduling of educational opportunities for the two interim one day meetings, Mr. Ewer stated R.V. Kuhns conducts two presentations per year on topics directed by the Board. Mr. Jim Voytko affirmed R.V. Kuhns is available to provide educational opportunities as requested by the Board.

MONTANA LOAN PROGRAMS

In-State Loan Program

Mr. Herb Kulow presented an update of the commercial and residential loan program portfolios. Commercial loans totaled $105,227,226 for 122 loans as of October 31, 2013. The dramatic payoff rate has slowed. There is one loan past due which is guaranteed by the Small Business Administration (SBA). The Vann's bankruptcy loan has not converted over to "other real estate owned" yet. The distressed appraised value is $900,000. Sale of the property should provide sufficient proceeds to pay off the current MBOI principal balance due of $634,111. Residential mortgage payoffs have also subsided leveling off at $14,063,523 at October 31, 2013. Ten loans are past due, including five over 90 days past due representing 2.85% of the portfolio, four of which are guaranteed, or 1.99%.

The Veterans' Home Loan Mortgage program (VHLM) balance has increased to $17,005,110, more than half way to the current program allocation of $30 million as of October 31, 2013. There are currently 18 new loans reserved totaling $3,449,670. Staff requested and received a reduction in servicing fees charged to MBOI by the Board of Housing (BOH). The .75% fee has been decreased to .50%.

Mr. Kulow reported he was asked by representatives of the U.S. Treasury to serve as a co-chairman for the State Small Business Credit Initiative (SSBCI) and has accepted.

Mr. Kulow noted the short term Montana Comprehensive Health Program (MCHP) loan has been paid as agreed. No additional funds are anticipated at this time; however, MCHP may utilize the $950,000 line of credit with MBOI depending on how the of implementation of the national health care program progresses.

Two loans were presented to the Loan Committee meeting held prior to the Board meeting.

The first loan presented is an MBOI direct infrastructure loan to the City of Great Falls for purchase of 100 acres of land and infrastructure (a nearly completed steel fabrication plant), from ADF International, Inc. The loan amount is $4,999,800 with a term of 15 years. The City, as the borrower, will lease the land and infrastructure to ADF Group U.S.A, Inc. and ADF International, Inc. (ADF), who will have a purchase option as part of the lease. ADF is a highly specialized fabricator of complex heavy steel structures of various kinds. MBOI indemnifies the City of Great Falls from having to repay the loan as the loan is a special limited obligation of the City, rather than a general obligation of the City. The loan is solely to be paid by Public Improvement Use fees imposed by the City on ADF Group, Inc. as the leasee. The property is appraised at $9.4 million, $1.2 million of which is land. Loan to value is 53%. ADF has invested substantial equity in the property already and has 50 employees currently undergoing training to run the plant upon completion, which is expected the third quarter of 2013. The MBOI loan amount is calculated using the 300 jobs estimated to be created over four years ($16,666 x 300 = $4,999,800). ADF is also self-financing a $6 million painting facility requiring no additional financing.

> Member Jack Prothero made a motion to approve the loan as presented. Member Marilyn Ryan seconded. The motion passed unanimously.

The second loan presented by Mr. Kulow is a participation loan with US Bank Great Falls (US Bank) to ADF International, Inc. (International) for purchase of equipment. The MBOI participation loan amount is $2,735,552, (80%), US Bank amount is $638,000 (20%), for a total loan amount of $3,419,440 for a term of 10 years. The loan will be secured by a first lien on the equipment and an Irrevocable Financial Letter of Credit (Letter of Credit) from ADF's bank, The National Bank of Canada (Bank) for the full loan amount. Approval of the loan by US Bank was granted shortly prior to the Board meeting; therefore the loan write up is not complete at this time, however the financial documents are the same for both loans under consideration.

Board members briefly discussed postponing an immediate decision on the ADF International, Inc. participation loan until the loan write up is completed and distributed to Board members for review.

> Member Gary Buchanan made a motion to convene a telephone conference call at a later date to consider the $2,735,552 ADF International, Inc. participation loan following completion of the write up and distribution to the Board for review. Member Marilyn Ryan seconded. The motion passed 8-1. Member Jack Prothero voted nay.

BOND PROGRAM REPORTS

Activity Report

Ms. Louise Welsh reviewed the quarterly Activity Summary Report and presented the staff approved loans. There were four loans approved by the Loan Committee prior to the Board meeting.

The annual remarketing of INTERCAP bonds will take place in February 2014. Rates have remained steady in the 20 to 22 basis point range.

Staff approved loans are listed below:

Borrower:	Lewistown Rural Fire District
Purpose:	Purchase a new rescue/pumper fire engine
Staff Approval Date:	July 8, 2013
Board Loan Amount:	$ 175,000
Other Funding Sources:	$ 78,425
Total Project Cost:	$ 253,425
Term:	10 years

Borrower:	Town of Valier
Purpose:	Interim loan in anticipation of Rural Development (RD) long-term financing for wastewater treatment facility improvements
Staff Approval Date:	July 31, 2013
Board Loan Amount:	$ 775,000
Other Funding Sources:	$1,289,000
Total Project Cost:	$2,064,000
Term:	1 year

Borrower:	North Havre County Water District
Purpose:	Interim loan in anticipation of Rural Development (RD) long-term financing for water system improvements project
Staff Approval Date:	August 6, 2013
Board Loan Amount:	$ 783,000
Other Funding Sources:	$1,162,000
Total Project Cost:	$1,945,000
Term:	2 years

Borrower:	Vaughn Cascade County Water & Sewer District
Purpose:	Finance a service truck
Staff Approval Date:	August 6, 2013
Board Loan Amount:	$18,900
Other Funding Sources:	$ 0
Total Project Cost:	$18,900
Term:	7 years

Borrower:	Town of Kevin
Purpose:	Repair and improve a portion of the water system
Staff Approval Date:	September 6, 2013
Board Loan Amount:	$65,000
Other Funding Sources:	$ 0
Total Project Cost:	$65,000
Term:	15 years

Borrower:	Lewis & Clark County
Purpose:	Road improvements within the Crestwood Green Estates Rural Improvement District (RID)
Staff Approval Date:	September 18, 2013
Board Loan Amount:	$ 130,067
Other Funding Sources:	$ 0
Total Project Cost:	$ 130,067
Term:	10 years

Borrower:	City of Helena
Purpose:	Upgrade municipal golf course irrigation system
Staff Approval Date:	September 20, 2013
Board Loan Amount:	$ 600,000
Other Funding Sources:	$ 0
Total Project Cost:	$ 600,000
Term:	15 years

Borrower:	City of Livingston
Purpose:	Repair the City/County Building
Staff Approval Date:	September 27, 2013
Board Loan Amount:	$ 125,000
Other Funding Sources:	$ 0
Total Project Cost:	$ 125,000
Term:	3 years

REVIEW ASSET ALLOCATION RANGES

Ms. Becky Gratsinger, CFA, R.V. Kuhns & Associates and Mr. Cliff Sheets, CFA, CIO

Ms. Becky Gratsinger presented an overview of the analysis conducted on the current asset allocation and a review of any revisions or changes that may be recommended. Ms. Gratsinger explained the Mean Variance Optimization (MVO) was used to stress test several different assumption scenarios to evaluate the risks and shortcomings of various asset mixes. Utilizing a modeling process, levels of expected risk and return for the various asset classes are projected over the next 10 years and longer.

Looking at assumptions for 2011, 2012 and 2013, anticipated sharp declines in fixed income returns produced the largest change in assumptions anticipating the impact of rising interest rates on the asset class. Factors included in the equity assumptions analysis included inflation, prices over time, expected equity dividend projections, earnings per share growth and share buyback. Similar factors are analyzed for international equities.

Responding to a question from Member Jon Satre, Ms. Gratsinger noted comparisons to other consultants and national studies are also considered. Assumptions have been appropriately conservative, falling generally near the median of other consulting firms and are updated annually. Some consultants don't differentiate between domestic and international equities although RVK maintains this granularity. Risk is also analyzed asset class by asset class and models are adjusted and constraints applied for reasonableness, relative risk, and considerations such as liquidity and other factors (i.e. limits may be placed on illiquid asset classes such as private equity). All private equity and some real estate strategies are more difficult to predict as they tend to have high expected returns but also possess greater investment and other risks which are modeled as greater standard deviation such as 30.25% assumed for private equity. Because many of these investments aren't marked to market daily the impact of risk may not be observed as period to period investment return volatility in the same manner as marketable asset classes. Major market corrections and 'fat left tail distributions' are factored into the Monte Carlo testing as such events can have a large impact on markets, and therefore reflect a more real life view on stress test results.

Fixed income is expected to have modest returns, while cash over the near term may have negative returns since inflation rates could surpass cash investment returns. Possible assumption revisions for the next year will likely include adjustments to fixed income and a trim on expected returns in equities which have experienced recent robust returns. Responding to a question from Member Satre, Ms.

Gratsinger noted historical correlations are analyzed, but related assumptions place a higher emphasis on more recent history. Fixed income and real estate are good diversifiers due to their low correlation to the other asset classes. Private equity has a high correlation to equities. Core real estate is primarily driven by lease income.

The expected arithmetic return for MBOI using the actual asset allocation as of September 30, 2013, is 7.54%, net of fees. A more conservative portfolio was examined with less risk, but expected return also decreases to an expected level of 6.74%. Expanding asset ranges would allow for greater capital appreciation and if using an aggressive approach, the corresponding increase in expected return increases to an arithmetic return 8.83% with risk increasing significantly. The more aggressive portfolio has a large allocation to private equity and a large allocation to less liquid real estate. Private investment at these levels would be unusual in public pension plans, especially pension plans that are considered mature with larger cash flow obligations.

Using the Monte Carlo Simulation comparing conservative vs. aggressive portfolios within the current asset class ranges over the one and 10-year periods, annualized total returns for the conservative portfolio shows very little risk; however, the likelihood of reaching the 7.75% actuarial assumed rate of return becomes very low. The aggressive portfolio raises expected returns; but risk increases and portfolio diversification is reduced and liquidity restricted.

Most plan sponsors are choosing not to add additional risk to pursue significant incremental return in the near term and are continuing to focus on other portfolio construction techniques such as effective implementation of asset classes and selection of active managers where deemed helpful in pursuing excess returns over market indexes. Studies have shown that over 90% of return and risk experience is dependent upon asset allocation. In summary, after detailed analysis, no major changes are recommended for the current asset allocation ranges.

Member Jon Satre asked if R.V. Kuhns has suggestions for additional asset classes not currently held. Ms. Gratsinger stated adding any new class would not be recommended unless it provided substantial correlation opportunity to the portfolio. A small position in a new class would not add to the big picture unless it possessed attractive expected return, risk, or correlation attributes.

Upon completion of the R.V. Kuhns asset allocation study, Mr. Cliff Sheets presented a summary of the pension asset allocation review by staff. Asset allocation is reviewed and presented to the Board annually along with any changes proposed by staff. As an aside, the restructuring of the Domestic Equity Pool (MDEP) and International Equity Pool (MTIP) is nearly complete. Understanding the cash flows of the pension plans is critical to determine what level of asset-based liquidity is needed to pay pension benefits. This year staff conducted a detailed cash flow analysis of the two largest plans for this purpose. These retirement plans have been running cash negative (benefits exceed contributions plus portfolio cash income) requiring the sale of assets to pay benefits, a trend that has accelerated in recent years. Changes made to the pension plans during the 2013 legislative session have infused meaningful additional cash into the plans via higher contributions and other sources, resulting in a noticeable cash flow improvement for fiscal year 2014. However, both the Teachers' Retirement System (TRS) and the Public Employees' Retirement System (PERS) still remain cash flow negative. Nevertheless, at this time, the cash flow forecast does not indicate a change in asset allocation to a higher liquidity-oriented mix is necessary.

During fiscal year 2013, 2% of assets were sold to generate needed cash to offset the negative status of the two largest plans. During this timeframe the substantial rise in equity markets was helpful. Looking ahead over the next five years, the best case scenario still requires a net sale of assets; a worst case scenario, similar to the 2008-2012 time frame, while not probable, would require annual asset sales almost double the percentage of assets sold in FY 2013. This scenario is extreme in that it also assumes both a lower growth rate of contributions and a higher growth rate of benefits. Staff

will conduct a similar detailed cash flow analysis after each June 30 fiscal year end including a 5-year rolling outlook.

Mr. Sheets presented staff recommended changes to the Montana Public Retirement Plans Investment Policy Statement asset allocation ranges, which were minor. The changes recognize the inherent volatility of the markets and reflect an equity oriented risk appetite. Over the long term, expected returns are worth the equity volatility likely to be experienced. The question is how much equity exposure exists when cash needs may increase. Current equity levels are 2 to 1 domestic vs. international. Increasing the proportion of international equity is not recommended since any return advantage, which is limited in Mr. Sheets' view, is not worth the additional associated currency risks which come with international equity exposure.

Changes to asset allocation ranges last occurred in 2006. Current recommendations include narrowing the Real Estate Pool (MTRP) range and slight changes in ranges for the International Equity Pool (MTIP), Domestic Equity Pool (MDEP) and for the Retirement Funds Bond Pool (RFBP). No changes are recommended for the Private Equity Pool (MPEP) or STIP ranges. Cash and treasuries allow flexibility if liquidity is needed and fixed income remains one of the better diversifiers to balance equity risk. The low end of the range for RFBP is appropriate at 22%, as even when fixed income returns are low it acts as an insurance policy over the long term.

Senator Lewis asked what assets are sold to generate cash when liquidity needs arise.

Mr. Sheets stated sales vary across asset classes and both stocks and bonds are options. During the prior fiscal year, the monthly need for cash was $10-$11 million per month, but this has decreased over the last year. Domestic stocks have been sold over the past six months to provide cash and facilitate incremental moves in allocation ranges.

> Member Jon Satre made a motion to approve the revised Montana Public Retirement Plans Investment Policy Statement with revised asset allocation ranges as presented. Member Jack Prothero seconded. The motion passed unanimously.

CONSULTANT REPORT

R.V. Kuhns & Associates – Ms. Becky Gratsinger, CFA and Mr. Jim Voytko

Ms. Becky Gratsinger presented the quarterly performance report for the quarter ending September 30, 2013. Responding to a question from Vice Chairman Karl Englund, she agreed negative cash flows in pension plans is not desirable; however, it is a common issue with aging retirement plans. Cash flow impacts must be accommodated and assets cannot be locked up excessively in assets like private equity which carry liquidity restrictions. Naturally, plan member contributions are key to cash flow.

The quarter realized a nice resurgence in international equity with a return of 11.61%. Emerging markets have struggled and the difficulty for bonds continues, with near zero returns on cash. REITS lost ground for the quarter and continue to be volatile. The Federal Reserve indicated they will not begin tapering yet, which has provided renewed market confidence for the time being, but the Fed will ease off at some point. The rush on equities is ongoing and the S&P 500 returns are extremely good for one and two year time periods. The rally has been robust, but will not continue. The debt load on the economy continues to be very large and Gross Domestic Product (GDP) has grown despite Fed action.

P/E ratios show small and midcap markets remain expensive, while emerging markets are currently inexpensive. Yields continue at historic lows, although interest rates spiked during the quarter on the U.S. 10-year Treasury note. S&P 500 volatility has dropped. The pension plans neared the $9 billion mark at quarter end, with 55% of assets in equities. Total performance for the 1, 3, 5-year

periods all reflect the recent equity market rally. Private equity has not kept up with the recent rally, due in part to the lagging mark to market relative to strong liquid market equity returns. Comparative performance return rankings have improved over time and the 1, 3 and 5-year rankings look good. Mr. Sheets added the portfolio contains a slight underweight compared to peers of international equities, which underperformed domestic equities over the 3-year and quarter to date periods.

Ms. Gratsinger reviewed pension plan performance compared to the custom universe of peer groups with public fund holdings greater than $3 billion. Five year returns have yielded better return and less risk relative to the benchmark and comparable returns relative to peers, but with less risk. Over ten years performance has exceeded the benchmark with less risk and relative to peers performance has lagged modestly, with less volatility. Reviewing the investment pool comparative performance, the Domestic Equity Pool (MDEP) has shown improvement reflecting the effects of the recent restructuring. The Montana International Pool (MTIP) also shows positive returns. The Retirement Funds Bond Pool (RFBP) and Trust Funds Investment Pool (TFIP) have both outperformed the benchmark over the long term. The Real Estate Pool (MTRP) has taken longer to recover but is improving; however, performance is compared to the core only benchmark while the pool contains greater diversification. Core real estate has recovered first, but is expected to slow down. The Private Equity Pool (MPEP) continues to have good absolute returns.

Ms. Gratsinger reviewed comparative performance of equity holdings. All equities have performed well and MBOI has benefited from small and midcap overweight positions. Only three active managers trailed their benchmark for the quarter.

Mr. Sheets stated most funds in the peer comparisons contain an EAFE bias, while MTIP is based on developed and emerging markets. Any exposure to emerging markets has shown a drag on returns.

Ms. Gratsinger reviewed the Montana Domestic Equity Pool (MDEP). More than half of the pool is invested in passive assets, reducing tracking error.

Member Jack Prothero asked if there are particular managers showing cause for concern.

Ms. Gratsinger stated real estate managers are being monitored as well as a couple of international managers, but in general, active managers are doing well.

Senator Dave Lewis asked if funds like ours with negative cash flows and growing liabilities were a concern.

Ms. Gratsinger agreed that negative cash flow is not desirable and asset liabilities should be watched continually. However, the portfolio risk profile does not appear to need to be adjusted at this time.

INVESTMENT ACTIVITIES/REPORTS

Retirement System Asset Allocation Report

Mr. Cliff Sheets presented the asset allocation report for the nine pension funds for the quarter ending September 30, 2013. Domestic stocks were the primary driver of market returns for the quarter. The pension funds realized an increase in value of $390 million for the quarter. Total equities remained at 67.4% as $90 million in sales was offset by the strong showing of international stocks. Total private equity allocation decreased by .5% due to weaker relative returns and some sales. Net cash flow continues to be positive for private equity. Fixed income assets were down due mostly to dilution from stock appreciation, but returns were still positive. Despite $50 million in investments, fixed income still fell from 22.1% to 21.7%. The real estate allocation remained unchanged for the quarter. High levels of cash in Police and Firefighters' retirement systems are due to lump sum contributions received annually in September.

In summary, there were sales totaling $23 million out of the long term asset pools and a slight cash buildup. Teachers' Retirement System (TRS) had a onetime receipt of general fund cash and employer/employee contribution increases of 1% each, plus an influx of school district cash. The cash drag hurt performance slightly under current market conditions, although Police and Firefighters' did not suffer too badly from the incremental cash dilution. Comparisons of pension performance show PERS and TRS rankings in the top one-third vs. the State Street custom peer universe for calendar year to date and one year periods, in the top quartile for 3-years and in the middle of the pack for 5 and 7-year periods. Overall, general comparisons to peers are good, especially for more recent years. Mr. Sheets thanked the legislature for their efforts in shoring up the pension plans. He also thanked Ms. Chris Phillips for all her help on the cash flow model.

Montana Domestic Equity Pool (MDEP)

Mr. Rande Muffick reported on the Montana Domestic Equity Pool (MDEP) for the quarter ending September 30, 2013. Public stocks had a very strong quarter. The overweight positions of small and midcaps helped returns and the cash flow provided by reducing large cap stocks has contributed to the small and midcap overweight. Ten of the 13 active portfolio managers outperformed for the quarter. Rebalancing may be necessary going forward to allow staying within asset allocation ranges. The four new managers have been onboard for five months. Three out of the four managers have outperformed so far, and the fourth has performed better than would have been expected given recent market conditions.

Member Sheena Wilson asked if the market was in the midst of a bubble.

Mr. Muffick stated the market has undergone a long rally and a 5% correction is anticipated at some point.

Montana International Equity Pool (MTIP)

Mr. Muffick reported the Montana International Equity Pool (MTIP) has also performed strongly over the recent quarter. Emerging markets have done well and rallied through the quarter. After emerging markets trailed most of the year, both staff and managers have increased allocations over the last quarter.

The search is ongoing for international small cap and emerging market managers. Four managers are in the contract review phase, two each of small cap and emerging markets; funding is expected in the first quarter of the new year. Transactions should total approximately $120 million and will require three or four days for transitioning. New manager fundings will come from the emerging market index and from large caps.

Public Equity External Manager Watch List

Mr. Muffick stated there were no changes to the watch list this quarter; however, Hansberger and Alliance Bernstein have both shown improvement.

Responding to a question regarding the status of Alliance Bernstein from Member Jack Prothero, Mr. Muffick noted they are improving gradually, but holding a lot of distressed assets which have not done as well in the recent market has hindered improvement.

PUBLIC EQUITIES MANAGER WATCH LIST
November 2013

Manager	Style Bucket	Reason	$ Invested (mil)	Inclusion Date
Alliance Bernstein	International – LC Value	Performance	$108.6	August 2012
Hansberger	International – LC Growth	Performance	$114.7	May 2013

Fixed Income

Mr. Nathan Sax presented the Fixed Income overview and strategy. Interest rates rose in May and June reacting to Federal Reserve comments the central bank planned to begin cutting back on monthly bond purchases. However, after the September 17-18 Federal Reserve meeting, the decision was made to delay the start of tapering. Investors believe the earliest the Fed may initiate tapering will be early spring 2014. The U.S. 10-year Treasury peaked at a high of 3.0% at the start of September but fell back to 2.61% by September 30, 2013.

Fixed income assets are all within policy and sector ranges. Returns have suffered with the Barclays Capital Aggregate Index posting calendar year to date returns of -1.89 through September 30, 2013. Economic growth, the rate of inflation and hiring have slowed. Janet Yellen will replace Ben Bernanke as Federal Reserve chairman at the end of January when his term expires. The first concern for Ms. Yellen will be lowering the unemployment rate.

Reviewing the comparative performance for fixed income managers, Post Advisory has done exceptionally well. They remain on the watch list, but not due to performance, rather because of the retirement of founder Larry Post and corresponding changes in staff structure. High yield assets have done well and positioning at close to the top of the range has helped performance.

American West has been removed from the Below Investment Grade holdings list. A $20 million position was sold of the Department of Transportation lease-backed bond, in which had a large position, which acted to improve portfolio liquidity.

Short Term Investment Pool, State Fund Insurance & Treasurer's Fund Report

Mr. Rich Cooley gave an overview of the Short Term Investment Pool (STIP) for the quarter ending September 30, 2013. Market conditions changed little over the quarter. LIBOR rates have come down slightly. The STIP portfolio is within all guidelines for liquidity, diversification and average days to maturity, currently 47 days, compared to the policy maximum of 60 days. The STIP net yield is at 15-16 basis points. The STIP balance is down to $2.45 billion due to seasonal end of year factors.

Mr. Cooley reviewed the Treasurer's Fund. The fund totaled $971 million at September 30, 2013. Rates drifted up slightly during the quarter for one and 3-year maturities. Purchases for the quarter included $20 million of 3-year agencies with an expected return of 75-90 basis points. The fund allocation is within all policy limits.

Mr. Cooley presented an overview of the State Fund Insurance portfolio for the quarter ending September 30, 2013. Fund performance continues to be good, boosted in part by the nearly 12% equity allocation. Due to continued strong equity returns, $11 million in equity units were sold to maintain the client preference of a 12% maximum allocation to equities. The addition of core real estate in spring 2013 has provided diversification and improved overall performance. Total fixed income outperformed the benchmark by 17 basis points during the quarter and by 67 basis points over one year. Long term returns compared to the fixed income benchmark were +99 basis points for three years, +174 basis points over five years, and +53 basis points for the past ten years for the quarter ending September 30, 2013.

Private Asset Pool Reviews

Montana Private Equity Pool (MPEP)

Mr. Ethan Hurley presented the private equity report for the quarter ending June 30, 2013. Cash flow remained positive for the pool for the seventh quarter in a row reflecting the self-financing maturity of the program. The pool remains broadly diversified with a concentration on buyouts. Geographic exposure is mostly within North America. Allocation to Asia will continue to increase but it is unpredictable. Axiom Asia has committed to a small Asia buyout fund. Investments in fund of funds will continue to decrease over time, in accordance with the focus on direct investments.

Responding to questions from Members Satre and Prothero, Mr. Hurley explained the level of fund of funds will decrease gradually; it is not prudent to accelerate the process. Early stage venture capital is the most beneficial utilization of fund of funds, as that is the most difficult area to break into. There is an extra layer of privacy which restricts the flow of information. Performance is always helped by eliminating the extra level of fees involved with fund of funds. Staff is prudent when choosing a particular fund of funds to invest in and target cases where there is no direct access to a particular area of the market. European buyouts, for example, would not be chosen at this time, as direct access is available.

Mr. Cliff Sheets added we scaled back venture capital and fund of funds given their characteristic of a very long term commitment period and fund life which can be problematic; going forward, both will be a minimal asset. For Asia, there are successful prospects for direct investment opportunities and the strategy will continue to be very selective when it comes to fund of funds.

Mr. Hurley continued, the overall returns for the portfolio are comparable to last quarter at a net investment multiple of 1.47 and IRR of 12.47% since inception in 1988, levels higher than those of the State Street Private Equity Index benchmark. A separate survey of private equity conducted by CEM Benchmarking for a collection of 26 state plans as of 12/31/12 showed the Montana results were in the first quartile on both a multiple and IRR basis versus this peer group.

Member Prothero asked about the wide variations in vintage years vs. the Private Edge index. Mr. Sheets stated the last five years have been more volatile due to the J curve effect. A lot of commitments occurred in 2007 during the mega fund phenomenon when half of all our commitments were to distressed funds. He went on to note the return performance since 1995 puts MBOI near the top decile for net IRR and in the top quartile for investment multiple compared to peers in the CEM survey as of 2012.

Mr. Hurley reported three commitments were made since the last Board meeting; $25 million each to Pine Brook Capital Partners II, LP, and HCI Equity Partners IV, LP, respectively. An additional $5 million was committed to White Deer Energy II, LP through acquisition of a secondary LP interest.

Fund Name	Vintage	Subclass	Sector	Amount	Date
Pine Brook Capital Partners II, LP	2013	Growth Equity	Energy & Financial Services	$25M	9/16/13
White Deer Energy II, LP	2013	Buyout	Energy	$5M	9/13/13
HCI Equity Partners IV, LP	2013	Buyout	Diversified	$25M	9/6/13

Montana Real Equity Pool (MTRP)

Mr. Hurley presented the real estate report for the quarter ended June 30, 2013. The three commitments made since the last Board meeting were $25 million each to Molpus Woodlands Fund IV, LP and DRA Growth and Income Fund VIII, LP and a $30 million commitment to BPG Investment Partnership IX, LP. Molpus and DRA are both re-ups with known entities, BPG is a new manager for us.

Fund Name	Vintage	Subclass	Sector	Amount	Date
Molpus Woodlands Fund IV, LP	2013	Timberland	Diverse	$25M	9/6/13
DRA Growth and Income Fund VIII, LP	2013	Value-Add	Diverse	$25M	8/23/13
BPG Investment Partnership IX, LP	2012	Value-Add	Diverse	$30M	7/12/13

The portfolio is well diversified by strategy and geographic exposure and is balanced and diversified by property type. The portfolio is exposed 11% internationally, which is expected to decline over time. Performance was positive for the quarter, although net cash flows remain negative.

Partnership Focus List
There were no changes to the MPEP or MTRP Focus lists since the last Board Meeting.

Member Prothero inquired what time frame is reasonable to evaluate returns for a long term asset such as real estate.

Mr. Hurley stated generally a 3-5 year timeframe should be considered depending on the type of strategy and individual closed end funds have usually reached value at five years at which time exits in the fund should be evaluated.

Mr. Sheets added pool inception had a large J curve because of initial timing into the market. The allocation weighting started out at 1-2% of the pension portfolio and has increased to the current allocation of 9%.

University of Montana Operating Funds Policy Statement
Mr. Cliff Sheets reported staff met with University staff and discussed proposed changes to the policy statement. The policy revisions reflect current client preferences and the last policy revision was completed in 2002. The Board will manage 100% of the assets. Staff recommends approval of the revised policy.

> Member Jack Prothero made a motion to approve the revised University of Montana Operating Funds Policy Statement as presented. Member Sheena Wilson seconded. The motion passed 7-0. Members Gary Buchanan and Quinton Nyman were absent for the vote.

Recap and To Do List
The Board will meet via conference call in December to consider an additional loan submission from ADF International, Inc.

ADJOURNMENT

There being no further business, the meeting was adjourned at 4:51 PM.

Next Meeting
The next regular meeting of the Board will be February 25-26, 2014 in Helena, Montana.

Complete copies of all reports presented to the Board are on file with the Board of Investments.

BOARD OF INVESTMENTS

APPROVE: Mark E. Noennig
Mark Noennig, Chairman

ATTEST: David Ewer
David Ewer, Executive Director

DATE: 2/25/14

MBOI:drc
1/22/14